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FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

NGUYEN, TANH Q

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 05/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/215,194

Applicant(s)

IKEGAMI ET AL.

Examiner

Tanh Q. Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 39-50, 52 and 53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 39-50, 52 and 53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


FRITZ FLEMING
PRIMARY EXAMINER
GROUP 2100

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 December 1998 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 39-50, 52-53 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for informing the user of the fact that the image forming apparatus is under the rewrite process (page 15, lines 6-12), while being enabling for informing the user of the fact that the image forming apparatus is under download of data into flash ROM 1004 instead of displaying copying settings during execution of the rewrite execution codes (i.e. the flash ROM 1004 being rewritten: page 22, line 25-page 23, line 7), and while being enabling for displaying "UNDER UPDATING OF DATA (FLASH ROM 1004) [FIG. 6], does not reasonably provide enablement for informing the user of the fact that the image forming apparatus is under download instead of displaying copying settings. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

Page 15, lines 6-12 discloses

"Returning to FIG. 4, when execution of the rewrite control program is started, i.e., when in this embodiment the power supply is turned on in the mode in which the built-in ROM is effective, the operator

is informed of the fact that the apparatus is under the rewrite process and the image forming operation cannot be effected”.

Such disclosure does not **explicitly** teach, “informing the user of the fact that the image forming apparatus is under download instead of displaying copying settings”.

Page 22, line 25-page 23, line 7 discloses

“FIG. 6 shows an example of display indicated when the flash ROM 1004 is rewritten. As illustrated, instead of the normal display for copying setting, the control panel displays a message informing the operator of the fact that copying is disabled and the apparatus is under download of data into the flash ROM 1004. Also, when the flash ROMs 1008, 1015 are rewritten, a similar message to that shown in FIG. 6 is displayed on the control panel”.

This disclosure merely teaches “informing the user of the fact that the image forming apparatus is under update of control codes by the rewrite execution codes instead of displaying copying settings” - as under download of data into the flash ROM 1004 suggests that control codes are rewritten into the flash ROM 1004 (i.e. the control codes in the flash ROM 1004 being updated).

Furthermore, the message “UNDER UPDATING OF DATA (FLASH ROM 1004)” on FIG. 6 indicates that the control codes are being updated, and is consistent with the previous interpretation of “under download of data into the flash ROM 1004” found in the description of FIG. 6. The disclosure on page 22, line 25-page 23, line 7 and FIG. 6, therefore, do not **explicitly** teach, “informing the user of the fact that the image forming apparatus is under download (of control codes) instead of displaying copying settings” when under download is interpreted as download of control codes by the rewrite execution codes.

Furthermore, there is no support from applicant’s disclosure when download is

interpreted as any type of download (i.e. download of data other than control codes - such as download of image data).

3. Claims 39-50, 52-53 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. It is not understood that applicant's invention explicitly teaches informing the user of the fact that the image forming apparatus is under download of control codes instead of displaying copying settings, or that applicant's invention teaches informing the user of the fact that the image forming apparatus is under download of data other than control codes (e.g. image data) instead of displaying copying settings.

Applicant is required to cancel the new matter in the reply to this Office Action.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

5. Claims 39-50, 52-53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitation "informing the user of the fact the image forming apparatus is under download or update of control codes by the rewrite execution codes" is ambiguous because the limitation can be interpreted - in one

instance as informing the user of the fact the image forming apparatus is under download (i.e. download of data other than control codes - such as download of image data), or the fact the image forming apparatus is under update of control codes by the rewrite execution codes; and in another instance as informing the user of the fact the image forming apparatus is under download of control codes by the rewrite execution codes, or the fact the image forming apparatus is under update of control codes by the rewrite execution codes.

Furthermore, the support for the claims (page 15, lines 6-12, page 22, line 25- page 23, line 7 and FIG. 6 of applicant's disclosure) renders the terms "download" and "upgrade" ambiguous - as the context for the disclosed support suggests that "download into the flash ROM 1004" is the same as "update" (see paragraphs 2 and 3 above).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 39-44, 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Nagata et al. (USP 5,787,288)** in view of **Senma (JP 08212079 A - translation)**, further in view of **Yamasaki et al. (USP 4,724,462)** or **Nakamura et al. (USP 6,134,711)**, and further in view of **Shaw (USP 6,341,373)**.

9. As per claim 39, **Nagata** teaches an image forming apparatus [10, FIG. 8] for forming an image in accordance with control codes, the image forming apparatus comprising:

a printing unit [7, FIG. 8] for printing an image (col. 4, line 67-col. 5, line 1);

a memory [3, FIG. 8] for storing the control codes (col. 4, lines 56-58) to control the image forming apparatus having the printing unit;

display means [6, FIG. 8] for displaying messages associated with an image forming operation (col. 4, lines 66-67);

receiving means [2, FIG. 8] for receiving from an external apparatus [9, FIG. 8] rewrite execution codes, which are adapted to execute rewriting of the control codes in the memory, and receiving from the external apparatus new control codes (col. 2, line 63-col. 3, line 3; col. 4, lines 54-56; col. 8, lines 41-48); and

rewriting means (col. 5, lines 8-11) for rewriting control codes which have been stored in the memory, with the new control codes received by the receiving means (col.

6, lines 17-24; col. 6, lines 40-41; col. 6, lines 51-54; col. 7, lines 44-46; col. 8, lines 57-59).

Nagata also teaches the display means for indicating operating status (col. 4, lines 66-67) and the display means being used to alert (a user of the image forming apparatus) that the apparatus control program is being renewed (col. 5, lines 25-33), hence teaches the display means displaying a message informing a user of the fact that the image forming apparatus is under update of control codes by the rewrite execution codes. Nagata does not explicitly teach the display means displaying copying settings, or the display means not displaying copying settings.

Senma teaches a display means [5, FIG. 3] specifically displaying copying settings and error messages ([0019], lines 5-9), and further teaches the display means displaying "download under execution" when a download is being executed ([0033], lines 6-9) from RAM into nonvolatile storage medium [FIG. 5] (**i.e. an update of control codes**) to provide the user with information regarding the operation and the operating status of an image forming apparatus. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Senma's display means into Nagata's image forming apparatus since such incorporation would provide a user of Nagata's image information apparatus with information regarding the operation and the operating status of Nagata's image forming apparatus.

The combination of Nagata and Senma, therefore, teaches displaying copying settings and displaying a message informing the user of the fact that the image forming apparatus is under update of control codes by the rewrite execution codes. The

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combination of Nagata and Senma does not explicitly disclose the display means not displaying copying settings during update of control codes.

Senma, however, teaches the desire for users to recognize at a glance that downloading (from RAM into nonvolatile storage medium) is currently being executed ([0014], lines 2-3) to prevent interruption of the downloading (from RAM into nonvolatile storage medium) by preventing inappropriate user actions ([0014]).

Yamasaki teaches an image forming apparatus with means for turning off all displays except the display indicating an abnormal condition to help the user easily identify the abnormal condition (col. 1, lines 5-41).

Since updating of control codes (i.e. downloading control codes from RAM into nonvolatile storage medium in Senma) is a condition not normally associated with image forming operations (i.e. an abnormal condition), it would have been obvious to one of ordinary skill in the art at the time the invention was made to display only the message informing a user of the fact that the image forming apparatus is under update of control codes by the rewrite execution codes in the combination of Nagata and Senma, as is taught by Yamasaki for the purpose of clearly indicating to a user (user recognizing at a glance) that the image forming apparatus is under update of control codes - hence the display means not displaying copying settings during update of control codes, and instead displaying a message informing a user of the fact that the image forming apparatus is under update of control codes by the rewrite execution codes.

Nakamura teaches that only a message "UNDER UPGRADING" is displayed on

a display means while data is being updated [B9, FIG. 9; FIG. 10D]. Such a message clearly indicates to the user that data is being updated - as the user can recognize at a glance that data is being updated.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to only display a message such as "UNDER UPGRADING" into the combination of Nagata and Senma for the purpose of clearly indicating to the user (user recognizing at a glance) that the image forming apparatus is under update of control codes - hence the display means not displaying copying settings during update of control codes, and instead displaying a message informing a user of the fact that the image forming apparatus is under update of control codes by the rewrite execution codes.

Nagata in combination with Senma and Yamasaki (or Nagata in combination with Senma and Nakamura), therefore, teaches the claimed invention except for teaching transfer control codes which are adapted to control transfer of rewrite execution codes from the external apparatus, with the receiving means receiving the rewrite execution codes from the external apparatus in accordance with the transfer control codes.

Shaw teaches a client device [10, FIG. 1] comprising:

a memory [16, FIG. 1] for storing control codes [26, FIG. 1];

a receiving means [40, FIG. 1] for receiving from an external apparatus [60, FIG.

1] the rewrite execution codes which are adapted to execute rewriting of the control codes in the memory (col. 4, line 9-col. 5, line 15), in accordance with transfer control codes [24, FIG. 1; col. 4, lines 21-51) which are adapted to control transfer of rewrite

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execution codes from the external apparatus (col. 4, lines 12-20) and the receiving means also receiving new control codes from the external apparatus (col. 4, line 45-col.5, line 15);

a rewriting means for rewriting the control codes, which has been stored in the memory with the new control codes, received by the receiving means (col. 4, line 46-col. 5, line 15).

Shaw's teachings allow for a more secure download, recovery and upgrade of control codes in the memory (Abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Shaw's transfer control codes adapted to control transfer of rewrite execution codes into the combination of Nagata, Senma and Yamasaki (or the combination Nagata, Senma and Nakamura) because the teachings are directed to renewing control codes in a memory with control codes received from an external apparatus using rewrite execution codes also received from the external apparatus, and because Shaw's aforementioned teachings would allow for a more secure download, recovery and upgrade of the control codes in the memory.

10. As per claims 40-44, Nagata teaches the rewrite execution codes being transferred to a non-volatile memory medium [3, FIG. 8] as the memory and stored therein (col. 9, lines 14-16); Shaw teaches the rewrite execution codes being transferred to a non-volatile memory medium [16, FIG. 1] as the memory and stored therein (col. 5, lines 13-15) - claim 40;

Shaw teaches the rewrite execution codes including address information of the

memory for executing rewriting of the control codes in accordance with the address information (col. 4, line 41-col. 5, line 15; col. 5, lines 32-35) - claim 41;

Nagata teaches an image forming control means for controlling an image forming process, and a switching means for exclusively changing over between the image forming process and the rewriting of the control codes (col. 5, lines 5-11; col. 6, lines 17-24); Shaw teaches a switching means [20, FIG. 1] for exclusively changing over between an operational process and the rewriting of the control codes (col. 2, lines 59-61; col. 3, lines 23-30) - col. 42;

Nagata teaches the switching means exclusively changing over in accordance with a predetermined command [NSS signal] transmitted from the external apparatus (col. 6, lines 51-54); Shaw teaches the switching means exclusively changing over in accordance with a predetermined switch [20, FIG. 1; col. 3, lines 23-30] - claim 43; and

Nagata teaches the switching means exclusively changing over in accordance with a predetermined command [NSS signal] transmitted from the external apparatus (col. 6, lines 51-54); Shaw teaches the switching means exclusively changing over in accordance with a predetermined command transmitted from the external apparatus (col. 3, line 42-col. 4, line 7) - claim 44.

11. As per claim 52, Nagata in combination with Senma, Yamasaki, and Shaw (or Nagata in combination with Senma, Nakamura, and Shaw) above teaches an image forming apparatus (claim 39) having means corresponding to the steps of the rewrite control method of claim 52, therefore teaches the rewrite control method for such an apparatus.

12. Claims 45, 47-48, 50, 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Nagata et al.** in view of **Senma**, and further in view of **Yamasaki et al.** or **Nakamura et al.**.

13. As per claim 45, **Nagata** teaches an image forming apparatus [10, FIG. 8] for forming an image in accordance with control codes, the image forming apparatus comprising:

a printing unit [7, FIG. 8] for printing an image (col. 4, line 67-col. 5, line 1);

a code memory [3, FIG. 8] for storing the control codes (col. 4, lines 56-58) which are adapted to control the image forming apparatus having the printing unit;

a processor [1, FIG. 8] for controlling the overall operation of the image forming apparatus (col. 4, lines 52-54), hence a processor for controlling the image forming apparatus in accordance with the control codes stored in the code memory (col. 4, lines 56-58),

wherein the processor controls transfer of the rewrite execution codes, which are adapted to execute rewriting of the control codes from an external apparatus [9, FIG. 8], the processor controls transfer of new control codes from the external apparatus [2, FIG. 8; col. 2, line 63-col. 3, line 3; col. 4, lines 54-56; col. 8, lines 41-48], and the processor controls the rewriting of the control codes, which have been stored in the code memory, with the new control codes transferred from the external apparatus (col. 5, lines 8-11; col. 6, lines 17-24; col. 6, lines 40-41; col. 6, lines 51-54; col. 7, lines 44-46; col. 8, lines 57-59); and

an informing unit [6, FIG. 8] displaying a message informing a user of the

operating status of the image forming operation (col. 4, lines 66-67).

Nagata also teaches the informing unit being used to alert (a user of the image forming apparatus) that the apparatus control codes are being renewed (col. 5, lines 25-33), hence teaches the informing unit displaying a message informing a user of the fact that the image forming apparatus is under update of control codes by the rewrite execution codes. Nagata does not explicitly teach the informing unit displaying copying settings, or the informing unit not displaying copying settings.

Senma teaches an informing unit [5, FIG. 3] specifically displaying copying settings and error messages ([0019], lines 5-9), and further teaches the informing unit displaying "download under execution" when a download is being executed ([0033], lines 6-9) from RAM into nonvolatile storage medium [FIG. 5] (**i.e. an update of control codes**) to provide the user with information regarding the operation and the operating status of an image forming apparatus. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Senma's informing unit into Nagata's image forming apparatus since such incorporation would provide a user of Nagata's image information apparatus with information regarding the operation and the operating status of Nagata's image forming apparatus.

The combination of Nagata and Senma, therefore, teaches displaying copying settings and displaying a message informing the user of the fact that the image forming apparatus is under update of control codes by the rewrite execution codes. The combination of Nagata and Senma does not explicitly disclose the informing unit not displaying copying settings during update of control codes.

Senma, however, teaches the desire for users to recognize at a glance that downloading (from RAM into nonvolatile storage medium) is currently being executed ([0014], lines 2-3) to prevent interruption of the downloading (from RAM into nonvolatile storage medium) by preventing inappropriate user actions ([0014]).

Yamasaki teaches an image forming apparatus with means for turning off all displays except the display indicating an abnormal condition to help the user easily identify the abnormal condition (col. 1, lines 5-41).

Since updating of control codes (i.e. downloading control codes from RAM into nonvolatile storage medium in Senma) is a condition not normally associated with image forming operations (i.e. an abnormal condition), it would have been obvious to one of ordinary skill in the art at the time the invention was made to display only the message informing a user of the fact that the image forming apparatus is under update of control codes by the rewrite execution codes in the combination of Nagata and Senma, as is taught by Yamasaki for the purpose of clearly indicating to a user (user recognizing at a glance) that the image forming apparatus is under update of control codes - hence the informing unit not displaying copying settings during update of control codes, and instead displaying a message informing a user of the fact that the image forming apparatus is under update of control codes by the rewrite execution codes.

Nakamura teaches that only a message "UNDER UPGRADING" is displayed on an informing unit while data is being updated [B9, FIG. 9; FIG. 10D]. Such a message clearly indicates to the user that data is being updated - as the user can recognize at a glance that data is being updated.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to only display a message such as "UNDER UPGRADING" into the combination of Nagata and Senma for the purpose of clearly indicating to the user (user recognizing at a glance) that the image forming apparatus is under update of control codes - hence the informing unit not displaying copying settings during update of control codes, and instead displaying a message informing a user of the fact that the image forming apparatus is under update of control codes by the rewrite execution codes.

14. As per claims 47-48, 50, Nagata teaches the code memory including a rewritable EEPROM (col. 4, lines 56-58) - claim 47;

the image forming apparatus having a printing unit having a similar construction to a copying machine (col. 5, lines 33-39), hence the image forming apparatus being a copying machine or a printer - claim 48;

the processor exclusively changing over between the image forming process and the rewriting of the control codes (col. 5, lines 5-11; col. 6, lines 17-24; col. 6, lines 51-54) - claim 50.

15. As per claim 53, Nagata in combination with Senma, and Yamasaki, (or Nagata in combination with Senma, and Nakamura) above teaches an image forming apparatus (claim 45) having means corresponding to the steps of the rewrite control method of claim 53, therefore teaches the rewrite control method for such an apparatus.

16. Claims 46, 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Nagata et al. in view of **Senma**, further in view of **Yamasaki et al.** or **Nakamura et al.**, and further in view of **Shaw**.

17. As per claim 46, Nagata in combination with Senma and Yamasaki (or Nagata in combination with Senma and Nakamura) teaches the claimed invention except for explicitly teaching the processor controlling transfer of the rewrite execution codes in accordance with transfer control codes which are adapted to control transfer of the rewrite execution codes from the external apparatus.

Shaw teaches a client device [10, FIG. 1] comprising:

a code memory [16, FIG. 1] for storing control codes [26, FIG. 1];

a processor [12, FIG. 1] within client device [10, FIG. 1] for controlling the image forming apparatus in accordance with the control codes stored in the code memory (col. 4, lines 1-4), wherein the client device (hence the processor of the client device) controls the transfer of the rewrite execution codes, the transfer of new control codes from the external apparatus (col. 4, lines 45-col. 5, line15), and the rewriting of the control codes (col. 4, lines 45-col. 5, line15), and the processor controlling the transfer of the rewrite execution codes from the external apparatus in accordance with the transfer control codes which are adapted to control transfer of the rewrite execution codes from the external apparatus (col. 4, lines 8-44).

Shaw's teachings allow for a more secure download, recovery and upgrade of control codes in the memory (Abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Shaw's transfer control codes adapted to control

transfer of rewrite execution codes into the combination of Nagata, Senma and Yamasaki (or the combination Nagata, Senma and Nakamura) because the teachings are directed to renewing control codes in a memory with control codes received from an external apparatus using rewrite execution codes also received from the external apparatus, and because Shaw's aforementioned teachings would allow for a more secure download, recovery and upgrade of the control codes in the memory.

18. As per claim 49, Nagata in combination with Senma and Yamasaki (or Nagata in combination with Senma and Nakamura) teaches the claimed invention except for explicitly teaching the rewrite execution codes including address information of the code memory and the processor controlling rewriting of the control codes with the new control codes in accordance with the address information.

Shaw teaches the rewrite execution codes including address information of the code memory for executing rewriting the control codes in accordance with the address information (col. 4, line 41-col. 5, line 15; col. 5, lines 32-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include address information of the code memory in the rewrite execution codes - as is taught by Shaw, for the purpose of allowing Nagata's processor to control rewriting control codes (i.e. executing rewriting of control codes) in accordance with address information included in the rewrite execution codes.

Response to Arguments

19. Applicant's arguments filed 03/29/04 with respect the 112 first and second

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paragraphs rejections of claims 39, 45, 52, 53 have been fully considered but they are not persuasive. The claims have been amended to include the limitation "informing a user of the fact that the image forming apparatus is under update of control codes by the rewrite execution codes, instead of displaying copying settings" (which is supported by applicant's disclosure) in an attempt to overcome the 112 first and second paragraphs rejections of the office action mailed 12/22/03.

The amendment, however, also includes the limitation "informing a user of the fact that the image forming apparatus is under download instead of displaying copying settings" - which is not explicitly supported by applicant's disclosure, as addressed in the new 112 first and second paragraphs rejections of the amended claims (new grounds of rejections).

20. Applicant's arguments with respect to the 103 rejections of claims 39, 45, 52, 53 over Nagata, Nakamura and Senma have been considered, but are moot in view of the new ground(s) of rejection.

21. Applicant's request for individual consideration of each of the dependent claims on its own merits because each of the dependent claims is deemed to define an additional aspect of the invention (as argued by applicant) has been fully addressed in the 103 rejections above.

22. The 103 rejections over Knodt and Whitley in combination with rejections over Nagata, Shaw, Nakamura, and Senma are no longer included to simplify prosecution.

The alternative 103 rejections of claims 39-44, 46, 49, 52 (Shaw in view of

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Nagata, further in view of Senma, and further in view of Yamasaki or Nakamura) are also not included to simplify prosecution - as the lack of comments from applicant in response to previous office actions regarding the combination of Shaw in view of Nagata (or Nagata in view of Shaw) suggests that applicant conceded that either combination teaches the claimed invention except for the limitation "informing a user of the fact that the image forming apparatus is under download or update of control codes by the rewrite execution codes, instead of displaying copying settings".

Conclusion

23. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanh Quang Nguyen whose telephone number is (703) 305-0138, and whose e-mail address is tanh.nguyen36@uspto.gov. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin, can be reached on (703) 308-3301. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306 for After Final, Official, and Customer Services, or (703) 746-5672 for Draft to the Examiner (please label "PROPOSED" or "DRAFT").

Effective May 1, 2003 are new mailing address is:

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197

A handwritten signature in black ink, appearing to read 'F. Fleming', with a stylized flourish at the end.

FRITZ FLEMING
PRIMARY EXAMINER
GROUP 2100

TQN
May 24, 2004